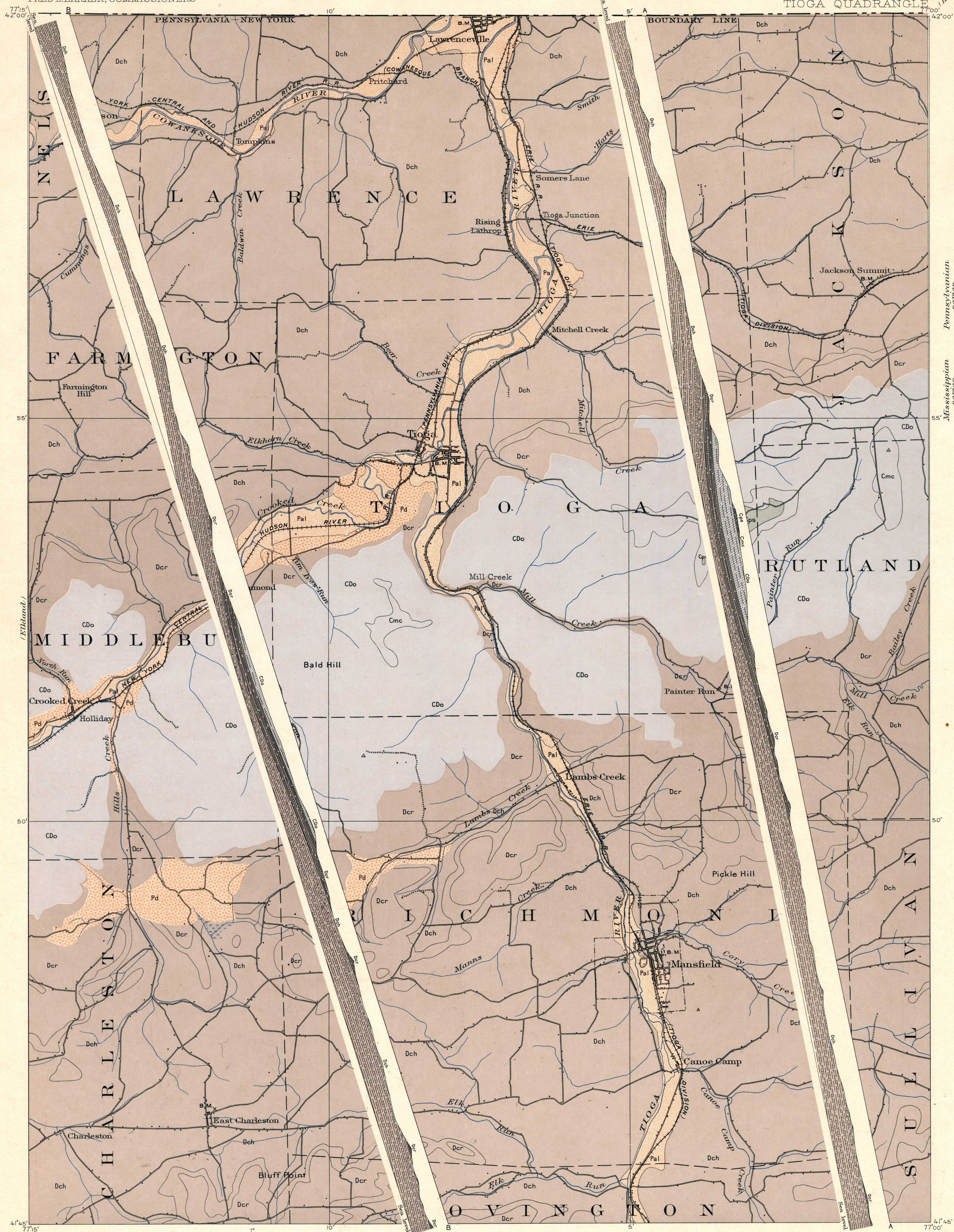


U.S. GEOLOGICAL SURVEY
CHARLES D. WALCOTT, DIRECTOR

STATE OF PENNSYLVANIA
GEORGE WMC NEES, SIMON HARROLD,
FRED D. BARKER, COMMISSIONERS

STRUCTURE SECTIONS

PENNSYLVANIA
(TIOGA COUNTY)
TIOGA QUADRANGLE



LEGEND

SURFICIAL ROCKS

SHEET SYMBOL

Pal

Valley alluvium
(gravel, sand, and silt in the larger valleys)

Pd

Deposits other than alluvium
(shown only where they cover the boundaries between underlying formations)

PLEISTOCENE

SEDIMENTARY ROCKS

SHEET SYMBOL

Cps

Sharon conglomerate member of
Potsville formation
(white quartz conglomerate at the base of the formation)

UNCONFORMITY

Cmc

Mauch Chunk formation
(red shale, green and buff shale and sandstone, and fire clay)

CD

Oswayo formation
(green sandstone and shale)

Dcr

Cattaraugus formation
(red shale and sandstone)

Dch

Chemung formation
(buff and gray shale, sandstone, and impure limestone)

CARBONIFEROUS

DEVONIAN

H.M. Wilson, Geographer in charge.
Control by S.S. Gannett, Oscar Jones, and J.H. Wheat.
Topography A.M. Walker.
Surveyed in 1899 and 1900 in cooperation with the
State of Pennsylvania.

Scale 62500
1 2 3 4 Miles
1 2 3 4 Kilometers
Edition of June 1903.

M.R. Campbell, Geologist in charge.
Geology by Myron L. Fuller.
Surveyed in 1901.